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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,534	02/21/2002	Katsunori Nishimura	62807-034	3061
20277	7590	05/11/2004	EXAMINER	
MCDERMOTT WILL & EMERY 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			LE, HOA VAN	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/078,534

Applicant(s)

NISHIMURA ET AL.

Examiner

Hoa V. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>21 February 2002</u> . | 6) <input type="checkbox"/> Other: _____  |

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This is in response to the Election filed on 09 April 2004.

- I. Applicants elect the invention of Group II, claims 8-13 without traverse being acknowledged.
- II. Applicants' prior art submission filed on 21 February 2003 has been considered to the extent of English language being provided.
- III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wangerow (2002/0094464) and Inoue et al (2002/0031698), Inoue et al (2001/0051294) and Van Dine et al (6,120,923).

Wangerow discloses, teaches and suggests a fuel cell having substantially flat separators having passages for gas and water and supply and exhaust ports for gas and water to pass through and the known and conventional accessories in a fuel cell. Please see the whole disclosure in each of the applied references, especially in Wangerow at figure 2 and its descriptions, paragraphs 0023 to 0025). For additional teachings and suggestions, the secondary references with respect to Inoue et al '689 at figures 1, 3, 4, 5, 17, 23, 26, 27, 34, 36, 37, 38 and their

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descriptions, paragraphs 007-008, 0018, 0027, 0088-0103, 0107- 0112 being cited to show the known teachings and suggestions of a seal on an outer peripheries of the passages, electrode, electrode sealant and hydrogen fuel being from a reformed hydrocarbon source; Inoue et al '294 at paragraph 0080 being cited to show the known silicon rubber sealant and Van Dine et al at figures 1-3 and their descriptions being cited to show a connection of hydrogen fuel from a reformed hydrocarbon apparatus. Since the above references are all related to fuel cell and its accessories, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cite or use the known rubbery seal, and selected supplied hydrogen fuel from the secondary references for the desired advantage to avoid a leak, resilient sealing structure and known source of hydrogen fuel supplied as disclosed, taught, suggested and obtained in the secondary references.

IV. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuji et al (2002/0045084) and Inoue et al (2002/0031698), Inoue et al (2001/0051294) and Van Dine et al (6,120,923).

Fuji et al disclose, teach and suggest a fuel cell having substantially flat separators having passages for gas and water and supply and exhaust ports for gas and water to pass through and the known and conventional accessories in a fuel cell. Please see the whole disclosure in each of the applied references, especially in Fuji et al at figures 1, 2, 3, 4, 14, 16, 18 and 19 and their descriptions, paragraphs 0042- 0050 and 0184. For additional teachings and suggestions, the secondary references with respect to Inoue et al '689 at figures 1, 3, 4, 5, 17, 23, 26, 27, 34, 36, 37, 38 and their descriptions, paragraphs 007-008, 0018, 0027, 0088-0103, 0107- 0112 being

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cited to show the known teachings and suggestions of a seal on an outer peripheries of the passages, electrode, electrode sealant and hydrogen fuel being from a reformed hydrocarbon source; Inoue et al '294 at paragraph 0080 being cited to show the known silicon rubber sealant and Van Dine et al at figures 1-3 and their descriptions being cited to show a connection of hydrogen fuel from a reformed hydrocarbon apparatus. Since the above references are all related to fuel cell and its accessories, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cite or use the known rubbery seal, and selected supplied hydrogen fuel from the secondary references for the desired advantage to avoid a leak, resilient sealing structure and known source of hydrogen fuel supplied as disclosed, taught, suggested and obtained in the secondary references.

V. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (2002/0031698), Inoue et al (2001/0051294) and Van Dine et al (6,120,923).

Inoue et al '698 disclose, teach and suggest a fuel cell having substantially flat separators having passages for gas and water and supply and exhaust ports for gas and water to pass through, a seal on an outer peripheries of the passages, electrode, electrode sealant and hydrogen fuel being from a reformed hydrocarbon source and the known and conventional accessories in a fuel cell. Please see the whole disclosure in each of the applied references, especially in Inoue et al '698 at figures 1, 3, 4, 5, 17, 23, 26, 27, 34, 36, 37, 38 and their descriptions, paragraphs 007-008, 0018, 0027, 0088-0103, 0107-0112. For additional teachings and suggestions, the secondary references with respect to Inoue et al '689 Inoue et al '294 at paragraph 0080 being cited to show the known silicon rubber sealant and Van Dine et al at figures 1-3 and their

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descriptions being cited to show a connection of hydrogen fuel from a reformed hydrocarbon apparatus. Since the above references are all related to fuel cell and its accessories, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cite or use the known rubbery seal, and selected supplied hydrogen fuel from the secondary references for the desired advantage to avoid a leak, resilient sealing structure and known source of hydrogen fuel supplied as disclosed, taught, suggested and obtained in the secondary references.

VI. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (2001/0051294), Inoue et al (2002/0031698) and Van Dine et al (6,120,923).

Inoue et al '294 disclose, teach and suggest a fuel cell having substantially flat separators having passages for gas and water and supply and exhaust ports for gas and water to pass through, a seal on an outer periphery of the passages, electrode, electrode sealing and hydrogen fuel being from a reformed hydrocarbon source and the known and conventional accessories in a fuel cell. Please see the whole disclosure in each of the applied references, especially in Inoue et al '294 at figures 1, 3, 4, 5 and their descriptions, paragraphs 0060-008, 0082. For additional teachings and suggestions, the secondary references with respect to references with respect to Inoue et al '689 at figures 1, 3, 4, 5, 17, 23, 26, 27, 34, 36, 37, 38 and their descriptions, paragraphs 007-008, 0018, 0027, 0088-0103, 0107-0112 being cited to show the known teachings and suggestions of an electrode sealant and Van Dine et al at figures 1-3 and their descriptions being cited to show a connection of hydrogen fuel from a reformed hydrocarbon apparatus. Since the above references are all related to fuel cell and its accessories, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cite or

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use the known electrode sealant and selected supplied hydrogen fuel from the secondary references for the desired advantage to avoid a leak and known source of hydrogen fuel supplied as disclosed, taught, suggested and obtained in the secondary references.

VII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:00 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on 571-272-1385

Applicants may file a paper by (1) fax with a central facsimile receiving number 703-872-9306,

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le  
Primary Examiner  
Art Unit 1752

HVL  
04 May 2004

HOA VAN LE  
PRIMARY EXAMINER  
